

ABSTRACT

5 A system and method for the alignment of optical elements using an
unmounted LED die with a small lens as a beacon for each channel in an
optical switch. One LED is mounted next to each optical fiber in an
alignment hole in a ceramic form. Each LED has a conductive trace and wire
bond for independent electrical control. The LED shines through a pinhole to
10 limit the divergence of the beam. The pinhole is at the focus of a small lens
which is positioned adjacent to the form, and creates a real image at its
target. Because the LED and fiber are fixed closely together in the form,
misalignment due to thermal effects or mechanical drift is negligible.

[file: PATA375.I17]